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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/524,742 | 10/03/2005 | Ole-Ivar Holthe | GRI-101/PCT/US | 6848 |
| | 7590 03/24/200 ECHNOLOGIES AS | EXAMINER | | |
| ATTN: OLE-LVAR HOLTHE | | | NILANONT, YOUPAPORN | |
| 288 BUSH STREET # 4229 SAN FRANCISO, CA 94104 | | | ART UNIT | PAPER NUMBER |
| | | | 2446 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|-----------------------|--|--|--|--|
| Office Action Occurrence | 10/524,742 | HOLTHE, OLE-IVAR | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | YOUPAPORN NILANONT | 2446 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>17 No</u> | ovember 2008 | | | | | |
| <i>,</i> — · · · · · · · · · · · · · · · · · · · | action is non-final. | | | | | |
| <i>;</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>16-30</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>16-30</u> is/are rejected. | | | | | | |
| 7) Claim(s) <u>10, 16-17, 19-22, 24-25 and 27</u> is/are | objected to. | | | | | |
| | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>17 November 2008</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1.☐ Certified copies of the priority documents have been received. | | | | | | |
| | · | | | | | |
| 2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| dee the attached detailed emice action for a list of the certified copies not received. | | | | | | |
| Attachmont/s) | | | | | | |
| Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Traftsperson's Patent Drawing Review (PTO-948) | ate | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |

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DETAILED ACTION

Status of Claims:

Claims 16-30 are pending in this Office Action.

Claims 16-30 are new.

Claims 1-15 are cancelled.

The objections to the drawings are withdrawn based on applicant's amendments.

All objections and rejections to claims 1-15 are withdrawn in light of applicant's cancellation of the claims.

Response to Arguments

1. Applicant's arguments presented in the amendment filed 11/17/2008 have been considered but are most in view of the new ground(s) of rejection. The reasons are set forth below.

Applicant's invention as claimed:

Claim Objections

2. Claims 10, 16-17, 19-22, 24-25 and 27 are objected to because of the following informalities:

"the packet" on line 10 of claim 16 should be written as --the request packet-- for clarity;

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"GXML" in claims 16-17, 22 and 27 should be accompanied by its full name to avoid any confusion as to what it stands for. For purposes of examination, GXML has been construed as XML as described in paragraph [0051].

"GZIP" in claims 17, 22 and 27 should be accompanied by its full name to avoid any confusion. Furthermore, GZIP is not described in the original disclosure and therefore, has been construed as any compression method such as ZIP.

Claims 19-20 and 24-25 recite "runs as a computer game" or "runs inside a computer game", which are not described in the original disclosure and are unclear whether or not they are distinct from each other.

Claim 21 recites "the source computer (100) receives the packet and finds the game media files on a storage device (102);" twice (page 4 of 10 of the Amendment), which appears to be a mistake and the repetition should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 17, 22 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s)

contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

These claims recite the "virtual computer on a physical computer" running in "parallel with one or more other virtual source computer" limitation of the source computer.

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 16 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 7. Regarding claims 16 and 21, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
- 8. Claims 16-17, 21-22 and 26-27 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 9. Claim 26 is rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al. (US 7425950).
- 10. **Regarding claim 26**, Ito teaches, in a computer system, a method for authoring computer games over a network (105), comprising:

a software renderer (103) running on a destination computer (101) (Ito, column 5 lines 45-47 "Web browser 2...installed and executed on a commercial personal computer");

the software renderer (103) sends a packet containing a main header section (300) to the source computer (100) (Ito, column 12 lines 56-63 "saved on the Web server", column 5 lines 39-41, column 6 lines 36-45 and column 7 lines 29-32);

the software renderer (103) sends a packet containing a mesh_resource_block_header (600) to the source computer (100) for a selected 3D model data subset (Ito column 12 lines 56-63 "saved on the Web server", column 5 lines 39-41 and 45-47, column 6 lines 36-45 "necessary for displaying a 3D scene created...saved in the storage device as a single 3DA applet file, column 7 lines 1-18 "selected CTransform class");

the software renderer (103) sends packets containing mesh_resource_block_headers (600) to the source computer (100) for logical parts of a unselected 3D model data subset, and the external_link (324) is set (Ito column 12 lines 56-63 "saved on the Web server", column 5 lines 39-41 and 45-47, column 6 lines 36-45 "necessary for displaying a 3D scene created...saved in the storage device as a single 3DA applet file", column 7 lines 4-8 "CShape class", column 4 lines 22-36 "applet tag");

the software renderer (103) sends a packet containing a block header section (301) for each of the associated textures and media to the source computer (100) (Ito column 12 lines 56-63 "saved on the Web server", column 5 lines 39-41 and 45-47, column 6 lines 36-45 "necessary for displaying a 3D scene created...saved in the storage device as a single 3DA applet file", column 7 lines 13-26 "I3dObject 40 class", "Clipper class", "toolbar information");

the software renderer (103) sends a packet containing the first part of a mesh_resource_data_block (1300) to the source computer (100) (Ito column 12 lines 56-63 "saved on the Web server", column 5 lines 39-41 and 45-47, column 6 lines 36-45 "necessary for displaying a 3D scene created...saved in the storage device as a single 3DA applet file", column 7 lines 42-45 "the single CScene 36 object"); and

the source computer (100) receives the packets in any order and stores the 3D model on a storage device (102) (Ito, column 12 lines 56-63 "saved on the Web server").

Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of Cover ("VRML (Virtual Reality Modeling language) and X3D").
- 13. **Regarding claim 16**, Ito teaches, in a computer system, a method for viewing a large 3D model over a network (105), comprising:

a software renderer (103) running on a destination computer (101) (Ito, column 4 lines 22-36, figure 1 "Client Web browser 2" and column 3 lines 55-56 "personal computer");

the software renderer (103) is in the active state of displaying a scene (700), and executing program_code (729) (Ito, column 4 lines 22-36 "3DA applet is executed by the Web browser 2" and "to render 3D scenes");

the software renderer (103) sends a request packet to a source computer (100) (Ito, column 4 lines 63-65 "applet is executed...requests to

download a 3DA file") containing the logical name of a 3D model and subset selection criteria consisting of specific keyframe animations, polygon reduction, selecting polygons within a 3D volume space, or selecting textures and media (Ito, column 5 lines 1-10 "further information...scene-background image, a shape texture, and an applet toolbar...");

the source computer (100) receives the packet and finds the 3D model data (mesh) and associated media files (images, videos, text) on a storage device (102) (Ito, column 4 lines 66-67 "In response to that request, the Web server 6 sends the 3DA file to the Web browser 2", column 5 lines 10-12 "In response to the respective optional request...", column 6 lines 7-11 and 18-21 "polygon's vertexes, surface, and color, and image data...scene data...animation data");

the source computer (100) sends a packet containing a main header section (300) to the software renderer (103) (Ito, column 7 lines 29-32 "IdObject");

the source computer (100) sends a packet containing a mesh_resource_block_header (600) to the software renderer (103) for the selected 3D model data subset (Ito, column 7 lines 1-18 "selected CTransform class");

the source computer (100) sends packets containing
mesh_resource_block_headers (600) to the software renderer (103) for
logical parts of the unselected 3D model data subset, and the

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external_link (324) is set (Ito, column 7 lines 4-8 "CShape class", column 4 lines 22-36 "applet tag");

the source computer (100) sends a packet containing a block header section (301) for each of the associated textures and media to the software renderer (103) (Ito, column 7 lines 13-26 "I3dObject 40 class", "Clipper class", "toolbar information");

the source computer (100) sends a packet containing the first part of a mesh_resource_data_block (1300) to the software renderer (103) (Ito, column 7 lines 42-45 "the single CScene 36 object");

the software renderer (103) receives the packets in any order and renders the 3D model with associated textures and media (Ito, column 5 lines 28-33); and

the software renderer (103) reads user input devices (such as mouse, keyboard, gamepad, joystick, etc.) that is handled by the program_code (729) to interact with the 3D model and view it from different viewpoints (Ito, column 6 lines 61-67 and column 7 lines 1-3 "client-user events...keyboard or mouse...CController 59 class", "rotation").

Ito reference does not explicitly state that its 3DA file is a GX or GXML format file. However, Ito's 3DA file is partly created by importing 3D information from VRML file format.

Conversely, Cover teaches of describing a 3D file for the web or VRML using XML language (Cover, page 3 3rd paragraph dated August 9, 2001) in

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order to "bring rich and compelling 3D graphics to the Web for wide variety of applications" (Cover, page 3 3rd paragraph dated August 9, 2001).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have described 3D information of Ito's 3DA file in XML format as taught in Cover in order to provide "rich and compelling 3D graphics to the Web for wide variety of applications" (Cover, page 3 3rd paragraph dated August 9, 2001) and not just for Web browser.

- 14. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of Cover ("VRML (Virtual Reality Modeling language) and X3D") as applied to claim 16 above, and further in view of common knowledge in the art and ZDNet Gamespot ("Playstation2 Media: Star Wars: Episode I Starfighter").
- 15. **Regarding claim 17,** modified Ito teaches method according to claim 16, wherein:

GZIP compression is used on GX specific data (326 and 334),
GXML, and text files (Ito, column 18-21 "ZIP compression"); and
the software renderer (103) provides an API (Appendix B) to the
program_code (729) the API containing at least the classes and functions
to get and set the attributes of a data blocks section (302) (Ito, figure 4 (a-c) and figure 5).

Further, the modified Ito teaches the use of virtual computers running in parallel as a single physical source computer. Specifically Ito

shows a system center as a physical computer with different servers running on it to satisfy a user's needs to access and display 3DA file (Ito, figures 10 "Web sever 6", "FTP server 7" and "Database server 8").

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The modified Ito does not explicitly mention the followings:

JPEG or PNG compression is used on images;

UDP is used for packet transmission;

However, JPEG or PNG is well known in the art at the time the invention was made. JPEG standard was approved as ISO 10918-1 in 1994 and PNG is known as published as an RFC 2083 since 1996, both are used as image file format. UDP was designed and published in RFC 768 in 1980 as a stateless transmission protocol. It would have been obvious to the person having ordinary skill in the art, at the time the invention was made to have chosen existed methods as JPEG, PNG, or UDP in order to perform different tasks as these standards were made for as a matter of design choice.

Additionally, the modified Ito does not explicitly specify that the request packet sent from the client browser includes different id values that inform the source of the capabilities of the destination device's display.

ZDNet gamespot shows video links with available bitrates, screen sizes and compression languages (ZDNet, "56K| Cable| T1", "WM ZIP", "MPEG", "WM" and "RM"). It is known in the art that these links send HTTP request back to the content provider when clicked by the user. Furthermore HTTP request specifies user's preference for preferred language in the response.

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It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have included identifiers that identify the receiver's capabilities in the request of modified Ito because not every device has setup that is compatible with every encoding.

- 16. **Regarding claim 18,** modified Ito teaches method according to claim 17, wherein the software renderer (103) runs as a web browser plug-in inside a web browser on the destination computer (101) (Ito, figures 1 and 10 "Client 2", column 4 lines 22-32 "3DA applet is executed by the Web browser").
- 17. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of Cover ("VRML (Virtual Reality Modeling language) and X3D") as applied to claim 16 above, and further in view of common knowledge in the art and ZDNet Gamespot ("Playstation2 Media: Star Wars: Episode I Starfighter") as applied to claim 17 above, and further in view of Business Wire ("Discreet Unveils reactor-Advanced Physics for 3ds max").
- 18. **Regarding claim 19**, the references cited in the rejection of claim 17 teach method according to claim 17, but they fail to explicitly state that the software renderer (103) runs as a computer game on the destination computer (101). However, Ito only recites a specific third- party modeling software used as part of Ito's invention, called 3ds Max, to create 3D object for Ito's 3DA file (Ito, column 5 lines 61-67).

Conversely, the Business Wire reference discloses that 3ds Max is used as a dynamics library integrated in to a game (Business Wire, page 2, 3rd paragraph highlighted part).

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have realized that Ito's invention could be used within a computer game as taught by Business Wire, in order to allow real-world and real-time simulations in game development (Business Wire, page 2, 3rd paragraph).

19. **Regarding claim 20**, the references cited in the rejection of claim 17 teach method according to claim 17, but they fail to explicitly state that the software renderer (103) runs inside a computer game on the destination computer (101).

However, Ito only recites a specific third- party modeling software used as part of Ito's invention, called 3ds Max, to create 3D object for Ito's 3DA file (Ito, column 5 lines 61-67).

Conversely, the Business Wire reference discloses that 3ds Max is used as a dynamics library integrated in to a game (Business Wire, page 2, 3rd paragraph highlighted part).

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have realized that Ito's invention could be used within a computer game as taught by Business Wire, in order to allow real-world and real-time simulations in game development (Business Wire, page 2, 3rd paragraph).

20. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of Jones et al. (US 6134243) and DirectX® as seen in Wikipedia ("DirectX").

21. **Regarding claim 21**, In a computer system, a method for playing a computer game over a network (105), comprising:

a software renderer (103) running on a destination computer (101) (Ito, column 4 lines 22-36, figure 1 "Client Web browser 2" and column 3 lines 55-56 "personal computer");

the software renderer (103) sends a request packet to a source computer (100) containing the logical file name (Ito, column 4 lines 63-65 "applet is executed...requests to download a 3DA file") of a computer game;

the source computer (100) receives the packet and finds the game media files on a storage device (102) (Ito, column 4 lines 66-67 "In response to that request, the Web server 6 sends the 3DA file to the Web browser 2", column 5 lines 10-12 "In response to the respective optional request...", column 6 lines 7-11 and 18-21 "polygon's vertexes, surface, and color, and image data...scene data...animation data");

the source computer (100) receives the packet and finds the game media files on a storage device (102) (Ito, column 4 lines 66-67 "In response to that request, the Web server 6 sends the 3DA file to the Web browser 2", column 5 lines 10-12 "In response to the respective optional

request...", column 6 lines 7-11 and 18-21 "polygon's vertexes, surface, and color, and image data...scene data...animation data");

the source computer (100) sends a packet containing a main header section (300) to the software renderer (103) (Ito, column 7 lines 29-32 "IdObject");

the source computer (100) sends a packet containing a scene_block_header (400) to the software renderer (103) (Ito, column 7 lines 4-8 "CShape class");

the source computer (100) sends a packet containing a scene_data_block (700) to the software renderer (103) (Ito, column 7 lines 13-26 "I3dObject 40 class", "Clipper class", "toolbar information");

the software renderer (103) receives the packets in any order and executes the program_code (729) that is in Java byte code, assembler, or other code (Ito, column 5 line 31 "3DA applet to continue execution", column 6 lines 30-31 "JAVA applet");

the software renderer (103) reads user input devices (such as mouse, keyboard, gamepad, joystick, etc.) that is handled by the program_code (729) (Ito, column 6 lines 30-31 "interactive operations are possible with the JAVA applet", column 6 lines 61-67 "client-user events...via a keyboard...").

the program_code (729) loads 3D models and media from source computers (300) (Ito, column 4 lines 64-65 "requests to download a 3DA

file, column 5 lines 28-33 "3DA file and other data needed to display a 3D scene have been downloaded").

Ito does not explicitly teach effective content linking (figure 14) technique in its 3DA file format. However, Ito briefly suggests that an option for a browser to request an alternate 3DA file and/or a shape or shapes from other 3DA files is available (Ito, column 5 lines 13-17).

Conversely, Jones teaches content linking that links between multiple files with multimedia content using external link in the header (Jones, figure 5 and column 10 lines 58-67).

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have incorporated the teaching of Jones in Ito's file format in order to avoid making unnecessary copies of content data when they can be used repeatedly and thus efficiently use server's memory resources.

Further, the modified Ito does not explicitly specify 3D models rendering method using hardware accelerated graphics libraries (such as DirectX and OpenGL).

However, it is known in the art that a "hardware accelerated graphics libraries" such as DirectX comes with every version of Windows since Windows 98. Therefore, it would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have utilized such libraries existed in end-user's device as taught by Wikipedia (3rd paragraph) in order to reduce the amount of information needed to be sent to the user by the Ito's Web Server.

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22. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of Jones et al. (US 6134243) and DirectX® as seen in Wikipedia ("DirectX") as applied to claim 21 above, and further in view of common knowledge in the art and ZDNet Gamespot ("Playstation2 Media: Star Wars: Episode I Starfighter").

23. **Regarding claim 22,** modified Ito teaches method according to claim 21, wherein:

GZIP compression is used on GX specific data (326 and 334),
GXML, and text files (Ito, column 18-21 "ZIP compression"); and
the software renderer (103) provides an API (Appendix B) to the
program_code (729) the API containing at least the classes and functions
to get and set the attributes of a data blocks section (302) (Ito, figure 4 (a-c) and figure 5).

Further, the modified Ito teaches the use of virtual computers running in parallel as a single physical source computer. Specifically Ito shows a system center as a physical computer with different servers running on it to satisfy a user's needs to access and display 3DA file (Ito, figures 10 "Web sever 6", "FTP server 7" and "Database server 8").

The modified Ito does not explicitly mention the followings:

JPEG or PNG compression is used on images;

TCP is used for packet transmission of the scene;

UDP is used for packet transmission of program_code loading of 3D models and media from source computers (300) with effective content linking (figure 14);

However, JPEG or PNG is well known in the art at the time the invention was made. JPEG standard was approved as ISO 10918-1 in 1994 and PNG is known as published as an RFC 2083 since 1996, both are used as image file format. UDP was designed and published in RFC 768 in 1980 as a stateless transmission protocol. It would have been obvious to the person having ordinary skill in the art, at the time the invention was made to have chosen existed methods as JPEG, PNG, or UDP in order to perform different tasks as these standards were made for as a matter of design choice.

Additionally, the modified Ito does not explicitly specify that the request packet sent from the client browser includes different id values that inform the source of the capabilities of the destination device's display.

ZDNet gamespot shows video links with available bitrates, screen sizes and compression languages (ZDNet, "56K| Cable| T1", "WM ZIP", "MPEG", "WM" and "RM"). It is known in the art that these links send HTTP request back to the content provider when clicked by the user. Furthermore HTTP request specifies user's preference for preferred language in the response.

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have included identifiers that identify the receiver's capabilities in the request of modified Ito because not every device has setup that is compatible with every encoding.

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24. **Regarding claim 23**, modified Ito teaches method according to claim 22, wherein the software renderer (103) runs as a web browser plug-in inside a web browser on the destination computer (101) (Ito, figures 1 and 10 "Client 2", column 4 lines 22-32 "3DA applet is executed by the Web browser").

- 25. **Regarding claim 24**, Method according to claim 22, wherein the software renderer (103) runs as a computer game on the destination computer (101) (Wikipedia, 2nd paragraph "development of video games").
- 26. **Regarding claim 25**, Method according to claim 22, wherein the software renderer (103) runs inside a computer game on the destination computer (101) (Wikipedia, 3rd paragraph "runtimes were only installed by games").
- 27. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of common knowledge in the art, Cover ("VRML (Virtual Reality Modeling language) and X3D") and ZDNet Gamespot ("Playstation2 Media: Star Wars: Episode I Starfighter").
- 28. Regarding claim 27, Ito teaches method according to claim 26, wherein:
 GZIP compression is used on GX specific data (326 and 334),
 GXML, and text files (Ito, column 18-21 "ZIP compression");

the software renderer (103) provides an API (Appendix B) to the program_code (729) the API containing at least the classes and functions to get and set the attributes of a data blocks section (302) (Ito, figure 4 (a-c) and figure 5); and

the software renderer (103) is in the active state of displaying a scene (700), and executing program_code (729) (Ito, column 4 lines 22-36 "3DA applet is executed by the Web browser 2" and "to render 3D scenes").

Further, Ito teaches the use of virtual computers running in parallel as a single physical source computer. Specifically Ito shows a system center as a physical computer with different servers running on it to satisfy a user's needs to access and display 3DA file (Ito, figures 10 "Web sever 6", "FTP server 7" and "Database server 8").

Ito reference does not explicitly state that its 3DA file is a GX or GXML format file. However, Ito's 3DA file is partly created by importing 3D information from VRML file format.

Conversely, Cover teaches of describing a 3D file for the web or VRML using XML language (Cover, page 3 3rd paragraph dated August 9, 2001) in order to "bring rich and compelling 3D graphics to the Web for wide variety of applications" (Cover, page 3 3rd paragraph dated August 9, 2001).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have described 3D information of Ito's 3DA file in XML format as taught in Cover in order to provide "rich and compelling 3D graphics to the Web for wide variety of applications" (Cover, page 3 3rd paragraph dated August 9, 2001) and not just for Web browser.

The Ito reference, modified with Cover reference, does not explicitly mention the followings:

JPEG or PNG compression is used on images;

UDP is used for packet transmission;

However, JPEG or PNG is well known in the art at the time the invention was made. JPEG standard was approved as ISO 10918-1 in 1994 and PNG is known as published as an RFC 2083 since 1996, both are used as image file format. UDP was designed and published in RFC 768 in 1980 as a stateless transmission protocol. It would have been obvious to the person having ordinary skill in the art, at the time the invention was made to have chosen existed methods as JPEG, PNG, or UDP in order to perform different tasks as these standards were made for as a matter of design choice.

Additionally, the modified Ito does not explicitly specify that the request packet sent from the client browser includes different id values that inform the source of the capabilities of the destination device's display.

ZDNet gamespot shows video links with available bitrates, screen sizes and compression languages (ZDNet, "56K| Cable| T1", "WM ZIP", "MPEG", "WM" and "RM"). It is known in the art that these links send HTTP request back to the content provider when clicked by the user. Furthermore HTTP request specifies user's preference for preferred language in the response.

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have included identifiers that identify the receiver's capabilities in the request of modified Ito because not every device has setup that is compatible with every encoding.

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29. **Regarding claim 28,** modified Ito teaches method according to claim 27, wherein the software renderer (103) runs as a web browser plug-in inside a web browser on the destination computer (101) (Ito, figures 1 and 10 "Client 2", column 4 lines 22-32 "3DA applet is executed by the Web browser").

- 30. **Regarding claim 29**, the modified Ito teaches method according to claim 27, wherein the software renderer (103) runs as a software application on the destination computer (101) (Ito, figure 1 "Web browser" on "Client 2").
- 31. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 7425950) in view of common knowledge in the art, Cover ("VRML (Virtual Reality Modeling language) and X3D") and ZDNet Gamespot ("Playstation2 Media: Star Wars: Episode I Starfighter") as applied to claim 27 above, and further in view of Business Wire ("Discreet Unveils reactor-Advanced Physics for 3ds max").
- 32. **Regarding claim 30**, The references cited in the rejection of claim 27 teach method according to claim 27, but do not explicitly recite that the software renderer (103) runs inside a computer game on the destination computer (101). However, Ito reference recites a third-party modeling software used as part of Ito's invention, called 3ds Max, to create 3D object for Ito's 3DA file (Ito, column 5 lines 61-67).

Conversely, the Business Wire reference discloses that 3ds Max is used as a dynamics library integrated in to a game (Business Wire, page 2, 3rd paragraph highlighted part).

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It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have realized that Ito's invention could be used within a computer game as taught by Business Wire, in order to allow real-world and real-time simulations in game development (Business Wire, page 2, 3rd paragraph).

REMARKS

Applicant has cancelled all original claims and presented new set of claims.

The Applicant Argues:

That the multimedia file format taught by Goetz and other streaming file formats currently existed are not designed to contain large "3D models, textures, program code, video and other media."

<u>In response</u>, the examiner respectfully submits that the invention as claimed did not explicitly state any requirements on the size of the file. The original claims did not mention 3D models, in which the applicants argues, that would require large packet size.

Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUPAPORN NILANONT whose telephone number is (571) 270-5655. The examiner can normally be reached on Monday through Thursday and alternate Friday at 8:30 AM - 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. N./ Examiner, Art Unit 2446

/Jeffrey Pwu/ Supervisory Patent Examiner, Art Unit 2446